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FISH & RICHARDSON P.C.
3300 DAIN RAUSCHER PLAZA
MINNEAPOLIS, MN 55402

EXAMINER

POKRZYWA, JOSEPH R

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/300,348

Applicant(s)

MEISNER ET AL.

Examiner

Joseph R. Pokrzywa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37, 39-43, 45 and 46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-37 and 39-43 is/are allowed.
- 6) ☒ Claim(s) 1-17, 20, 22-32, 45 and 46 is/are rejected.
- 7) ☒ Claim(s) 18, 19 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 4/23/04, and has been entered and made of record. Currently, **claims 1-37, 39-43, 45, and 46** are pending.

Response to Arguments

2. Applicant's arguments, see pages 12-15, filed 4/23/04, with respect to the previous rejection(s) of the now amended **claims 1 and 27** under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Nakatsuyama (U.S. Patent Number 6,253,246).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. **Claims 1-5, 20, 22-30, 45, and 46** are rejected under 35 U.S.C. 102(e) as being anticipated by Nakatsuyama (U.S. Patent Number 6,253,246).

Regarding **claim 1**, Nakatsuyama discloses a method of preparing an image for downloading over a link (column 1, lines 13 through 62, and column 12, lines 21 through 27, see Fig. 1), the method comprising receiving a user selection for an image to prepare for downloading over a link (column 3, lines 31 through 61, and column 12, lines 21 through 27), retrieving current user settings reflective of desired settings for compressing the image (see Fig. 2, and column 12, lines 39 through 51, being the stored compressed data), the current user settings defining a first compressed file size for the image (column 12, lines 39 through 51), automatically deriving alternative compression settings, the alternative compression settings including compression settings scaled from the current user settings and defining alternative compressed file sizes for the image (column 7, line 58 through column 8, line 12), the alternative compressed file sizes being different from the first compressed file size (see Fig. 3, and column 7, line 58 through column 9, line 34), and substantially simultaneously presenting to a user a plurality of variations of the image where at least one variation is generated using one or more of the alternative compression settings that define an alternative compressed file size of the variation (see Figs. 2 and 3, column 5, line 39 through column 6, line 23, and column 7, line 58 through column 8, line 24, wherein the user is presented variations of the quality of the image and variations of the transfer time of the image simultaneously, so as to generate one variation using an alternative compression setting that define an alternative compressed file size of the variation, as read in column 1, lines 23 through 62, and column 11, line 52 through column 12, line 27).

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Regarding **claim 2**, Nakatsuyama discloses the method discussed above in claim 1, and further teaches of estimating for each variation of the image a respective amount of time required to download the variation to the user where the estimated time is calculated from an assumed transmission rate of the link and a compressed file size defined for the variation (column 11, line 30 through column 12, line 16).

Regarding **claim 3**, Nakatsuyama discloses the method discussed above in claim 1, and further teaches of determining a file format for the image and using the current user settings designated for the file format to generate a variation of the image (column 4, lines 35 through 48, column 7, line 15 through column 8, line 51, and column 12, lines 22 through 27).

Regarding **claim 4**, Nakatsuyama discloses the method discussed above in claim 3, and further teaches that the step of determining a file format determines an optimum file format for the image based on a predominant nature of the image data (column 4, lines 35 through 48, column 7, line 15 through column 8, line 51, and column 12, lines 22 through 27).

Regarding **claim 5**, Nakatsuyama discloses the method discussed above in claim 4, and further teaches of the step of determining an optimum file format for the image includes determining a predominant form for objects in the image (column 7, line 58 through column 9, line 34) and the step of automatically deriving includes scaling compression settings from the current user settings where the particular settings that are scaled depend on the predominant form of the image (column 5, line 52 through column 6, line 23).

Regarding **claim 20**, Nakatsuyama discloses the method discussed above in claim 1, and further teaches that the step of presenting a plurality of variations of the image includes

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displaying the image at the current user settings (column 5, line 52 through column 6, line 23, and column 11, line 56 through column 12, line 51).

Regarding **claim 22**, Nakatsuyama discloses the method discussed above in claim 1, and further teaches of a first set of alternative compression settings is derived by scaling the current user settings (column 5, line 52 through column 6, line 23) and a second set of alternative compression settings is derived by scaling the first set of alternative compression settings (column 5, line 52 through column 6, line 23).

Regarding **claim 23**, Nakatsuyama discloses the method discussed above in claim 1, and further teaches of receiving user modifications to the current user settings and generating a variation of the image using the modified user settings (column 5, line 52 through column 6, line 23, and column 7, line 58 through column 8, line 32).

Regarding **claim 24**, Nakatsuyama discloses the method discussed above in claim 23, and further teaches of recalculating compression settings for each presented variation of the image using the modified user settings and re-generating each variation using the recalculated compression settings (column 5, line 52 through column 6, line 23, and column 7, line 58 through column 8, line 32).

Regarding **claim 25**, Nakatsuyama discloses the method discussed above in claim 1, and further teaches that current user settings define a first quality of the image and each variation generated using the alternative compression settings has a different quality relative to the first quality (column 5, line 52 through column 6, line 23, and column 7, line 58 through column 8, line 32).

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Regarding *claim 26*, Nakatsuyama discloses the method discussed above in claim 2, and further teaches that the respective estimated download time is presented along with each variation of the image (column 11, line 30 through column 12, line 16).

Regarding *claim 27*, Nakatsuyama discloses a computer program (column 4, lines 60 through 67, and column 7, lines 25 through 33) for preparing an image for downloading over a link (column 1, lines 13 through 62, and column 12, lines 21 through 27, see Fig. 1), the computer program includes instructions for causing the computer to receive a user selection for an image to prepare for downloading over a link (column 3, lines 31 through 61, and column 12, lines 21 through 27), retrieve current user settings reflective of desired settings for compressing the image (see Fig. 2, and column 12, lines 39 through 51, being the stored compressed data), the current user settings defining a first compressed file size for the image (column 12, lines 39 through 51), automatically derive alternative compression settings, the alternative compression settings including compression settings scaled from the current user settings and defining alternative compressed file sizes for the image (column 7, line 58 through column 8, line 12), the alternative compressed file sizes being different from the first compressed file size (see Fig. 3, and column 7, line 58 through column 9, line 34), and substantially simultaneously present to a user a plurality of variations of the image where at least one variation is generated using one or more of the alternative compression settings that define an alternative compressed file size of the variation (see Figs. 2 and 3, column 5, line 39 through column 6, line 23, and column 7, line 58 through column 8, line 24, wherein the user is presented variations of the quality of the image and variations of the transfer time of the image simultaneously, so as to generate one variation using an alternative compression setting that define an alternative compressed file size of the

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variation, as read in column 1, lines 23 through 62, and column 11, line 52 through column 12, line 27).

Regarding **claim 28**, Nakatsuyama discloses the computer program discussed above in claim 27, and further includes instructions causing a computer to estimate for each variation of the image a respective amount of time required to download the variation to the user where the estimated time is calculated from an assumed transmission rate of the link and a compressed file size defined for the variation (column 11, line 30 through column 12, line 16).

Regarding **claim 29**, Nakatsuyama discloses the computer program discussed above in claim 27, and further includes instructions causing a computer to determine a file format for the image and use the current user settings designated for the file format to generate a variation of the image (column 4, lines 35 through 48, column 7, line 15 through column 8, line 51, and column 12, lines 22 through 27).

Regarding **claim 30**, Nakatsuyama discloses the computer program discussed above in claim 29, and further teaches that instructions for causing a computer to determine a file format include instructions that determine an optimum file format for the image based on a predominant nature of the image data (column 4, lines 35 through 48, column 7, line 15 through column 8, line 51, and column 12, lines 22 through 27).

Regarding **claim 45**, Nakatsuyama discloses the method discussed above in claim 1, and further teaches that substantially simultaneously presenting the plurality of variations includes presenting information related to a compressed file size of each variation (see Figs. 2 and 3, column 5, line 52 through column 6, line 23, and column 7, line 58 through column 8, line 32).

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Regarding **claim 46**, Nakatsuyama discloses the computer program discussed above in claim 27, and further teaches that the current user settings define a first quality of the image and each variation generated using the alternative compression settings has a different quality relative to the first quality (column 5, line 52 through column 6, line 23, and column 7, line 58 through column 8, line 32).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 6-8, 16, and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatsuyama (U.S. Patent Number 6,253,246) in view of Cossey (U.S. Patent Number 6,289,118, cited in the Office action dated 1/23/04).

Regarding **claim 6**, Nakatsuyama disclose the method discussed above in claim 5, but fails to expressly disclose if the predominant form is selected from the group of photographic and line art.

Cossey discloses a method of preparing an image for downloading over a link (see Fig. 4, column 4, lines 35 through 53) comprising automatically deriving alternative compression settings including compression settings scaled from current user settings (column 2, line 43 through column 4, line 32). Further, Cossey teaches of determining a file format for the image and using the current user settings designated for the file format to generate a variation of the

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image (see abstract, and column 2, line 43 through column 4, line 32), and that the step of determining a file format determines an optimum file format for the image based on a predominant nature of the image data (column 1, lines 41 through 57, and column 2, line 61 through column 3, line 26) and determines a predominant form for objects in the image (column 1, lines 41 through 57, and column 2, line 61 through column 3, line 26), and the step of automatically deriving includes scaling compression settings from the current user settings where the particular settings that are scaled depend on the predominant form of the image (see abstract, and column 2, lines 43 through 60). Cossey further teaches that the predominant form is selected from the group of photographic and line art (column 1, lines 11 through 63, and column 2, line 53 through column 4, line 32).

Nakatsuyama & Cossey are combinable because they are from the same field of endeavor, as they both select various compression methods based on the content of the data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Cossey in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Cossey's teachings, as the optimum compression algorithm would be selected based on the file format of the input image data.

Therefore, it would have been obvious to combine Nakatsuyama's system with Cossey's teachings to obtain the invention as specified in claim 6.

Regarding **claim 7**, Nakatsuyama and Cossey disclose the method discussed above in claim 6, and Cossey further teaches of determining if the predominant form is photographic and

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if so, setting the optimum file format to a JPEG/JFIF format (column 2, line 53 through column 3, line 67).

As discussed above, Nakatsuyama & Cossey are combinable because they are from the same field of endeavor, as they both select various compression methods based on the content of the data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Cossey in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Cossey's teachings, as the optimum compression algorithm would be selected based on the file format of the input image data.

Therefore, it would have been obvious to combine Nakatsuyama's system with Cossey's teachings to obtain the invention as specified in claim 7.

Regarding *claim 8*, Nakatsuyama and Cossey disclose the method discussed above in claim 6, and Cossey further teaches of determining if the predominant form is line-art and if so, setting the optimum file format to a GIF format (column 4, lines 1 through 33).

As discussed above, Nakatsuyama & Cossey are combinable because they are from the same field of endeavor, as they both select various compression methods based on the content of the data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Cossey in the system of Nakatsuyama.

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The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Cossey's teachings, as the optimum compression algorithm would be selected based on the file format of the input image data.

Therefore, it would have been obvious to combine Nakatsuyama's system with Cossey's teachings to obtain the invention as specified in claim 8.

Regarding *claim 16*, Nakatsuyama discloses the method discussed above in claim 4, but fails to expressly disclose of inspecting the image to determine if any pixel is transparent, and if so, setting the optimum file format to a GIF format.

Cossey discloses a method of preparing an image for downloading over a link (see Fig. 4, column 4, lines 35 through 53) comprising automatically deriving alternative compression settings including compression settings scaled from current user settings (column 2, line 43 through column 4, line 32). Further, Cossey teaches of determining a file format for the image and using the current user settings designated for the file format to generate a variation of the image (see abstract, and column 2, line 43 through column 4, line 32), and that the step of determining a file format determines an optimum file format for the image based on a predominant nature of the image data (column 1, lines 41 through 57, and column 2, line 61 through column 3, line 26) and determines a predominant form for objects in the image (column 1, lines 41 through 57, and column 2, line 61 through column 3, line 26). Cossey further teaches of inspecting the image to determine if any pixel in the image is transparent, and if so, setting the optimum file format to a GIF format (column 2, line 61 through column 3, line 67).

Nakatsuyama & Cossey are combinable because they are from the same field of endeavor, as they both select various compression methods based on the content of the data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Cossey in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Cossey's teachings, as the optimum compression algorithm would be selected based on the file format of the input image data.

Therefore, it would have been obvious to combine Nakatsuyama's system with Cossey's teachings to obtain the invention as specified in claim 16.

Regarding *claim 17*, Nakatsuyama discloses the method discussed above in claim 4, but fails to expressly disclose of inspecting the image to determine if the image includes more than one animation frame, and if so, setting the optimum file format to a GIF format.

Cossey discloses a method of preparing an image for downloading over a link (see Fig. 4, column 4, lines 35 through 53) comprising automatically deriving alternative compression settings including compression settings scaled from current user settings (column 2, line 43 through column 4, line 32). Further, Cossey teaches of determining a file format for the image and using the current user settings designated for the file format to generate a variation of the image (see abstract, and column 2, line 43 through column 4, line 32), and that the step of determining a file format determines an optimum file format for the image based on a predominant nature of the image data (column 1, lines 41 through 57, and column 2, line 61 through column 3, line 26) and determines a predominant form for objects in the image (column

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1, lines 41 through 57, and column 2, line 61 through column 3, line 26). Cossey further teaches of inspecting the image to determine if the image includes more than one animation frame, and if so, setting the optimum file format to a GIF format (column 2, line 61 through column 3, line 26).

Nakatsuyama & Cossey are combinable because they are from the same field of endeavor, as they both select various compression methods based on the content of the data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Cossey in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Cossey's teachings, as the optimum compression algorithm would be selected based on the file format of the input image data.

Therefore, it would have been obvious to combine Nakatsuyama's system with Cossey's teachings to obtain the invention as specified in claim 17.

7. **Claims 9-15, 31, and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatsuyama (U.S. Patent Number 6,253,246) in view of Rhoads (U.S. Patent Number 5,748,763, cited in the Office action dated 1/23/04).

Regarding *claims 9*, Nakatsuyama discloses the method discussed above in claim 4, but fails to specifically teach of calculating an amount of noise in the image, setting the optimum file format to a JFIF format if the amount of noise is above a predefined threshold, and otherwise setting the optimum file format to a GIF format.

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Rhoads teaches of determining an optimum format by calculating an amount of noise in the image (column 42, lines 13 through 51), setting the optimum file format to a JFIF format (being JPEG File Interchange Format) if the amount of noise is above a predefined threshold, and otherwise setting the optimum file format to a GIF format (column 57, lines 10 through 37).

Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 9.

Regarding **claim 10**, Nakatsuyama and Rhoads disclose the method discussed above in claim 9, and Rhoads further teaches that the step of calculating an amount of noise includes for each pixel in the image, comparing a relative color change between the pixel and one or more adjacent pixels to derive relative color change data (column 38, lines 28 through 54), determining an overall color change for the image using the relative color change data for each pixel (column 35, lines 10 through 40, and column 39, line 9 through column 40, line 24), and comparing the overall color change to the threshold value (column 38, lines 28 through 54, and column 39, line 52 through column 40, line 24).

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As discussed above, Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 10.

Regarding *claim 11*, Nakatsuyama and Rhoads disclose the method discussed above in claim 10, and Rhoads further teaches that the step of comparing the relative color change includes deriving a first set of color change data for a pixel by comparing the color of the pixel with a pixel immediately next in raster order (column 17, lines column 28, lines 10 through 27, and column 38, lines 28 through 54).

As discussed above, Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's

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teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Cossey's teachings to obtain the invention as specified in claim 11.

Regarding *claim 12*, Nakatsuyama and Rhoads disclose the method discussed above in claim 11, and Rhoads further teaches that the step of comparing the relative color change includes deriving a second set of color change data for the pixel by comparing the color of the pixel with a pixel at a same location in a next scanline of pixels for the image (column 21, line 52 through column 22, line 3, and column 34, line 54 through column 35, line 40, and column 38, lines 28 through 54).

As discussed above, Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 12.

Regarding *claim 13*, Nakatsuyama and Rhoads disclose the method discussed above in claim 12, and Rhoads further teaches that the step of determining an overall color change

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includes for each color change data set, summing all the color change data and averaging over the image (column 21, line 8 through column 22, line 3).

As discussed above, Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 13.

Regarding *claim 14*, Nakatsuyama and Rhoads disclose the method discussed above in claim 9, and Rhoads further teaches that the step of determining an overall color change includes summing all the color change data for the image and averaging over the image (column 10, lines 11 through 41).

As discussed above, Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's

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teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 14.

Regarding *claim 15*, Nakatsuyama and Rhoads disclose the method discussed above in claim 9, and Rhoads further teaches that the step of comparing a relative color change determines an actual color difference irrespective of a perceptual color difference (column 8, line 50 through column 9, line 12).

As discussed above, Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 15.

Regarding *claims 31*, Nakatsuyama discloses the program discussed above in claim 30, but fails to specifically teach of instructions for causing a computer to calculate an amount of noise in the image, set the optimum file format to a JFIF format if the amount of noise is above a predefined threshold, and otherwise set the optimum file format to a GIF format.

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Rhoads teaches of determining an optimum format by calculating an amount of noise in the image (column 42, lines 13 through 51), setting the optimum file format to a JFIF format (being JPEG File Interchange Format) if the amount of noise is above a predefined threshold, and otherwise setting the optimum file format to a GIF format (column 57, lines 10 through 37).

Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 31.

Regarding **claim 32**, Nakatsuyama and Rhoads disclose the program discussed above in claim 31, and Rhoads further teaches that the instructions for causing a computer to calculate an amount of noise include instructions causing a computer to, for each pixel in the image, compare a relative color change between the pixel and one or more adjacent pixels to derive relative color change data (column 38, lines 28 through 54), determine an overall color change for the image using the relative color change data for each pixel (column 35, lines 10 through 40, and column 39, line 9 through column 40, line 24), and compare the overall color change to the threshold value (column 38, lines 28 through 54, and column 39, line 52 through column 40, line 24).

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As discussed above, Nakatsuyama & Rhoads are combinable because they are from the same field of endeavor, as they both select various compression methods.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the teachings of Rhoads in the system of Nakatsuyama.

The suggestion/motivation for doing so would have been that the system of Nakatsuyama would become more efficient for compressing image data with the inclusion of Rhoads's teachings, as the amount of noise in the data would be used to determine the compression method, as recognized by Rhoads.

Therefore, it would have been obvious to combine Nakatsuyama's system with Rhoad's teachings to obtain the invention as specified in claim 32.

Allowable Subject Matter

8. **Claims 33-37, and 39-43** are allowed.

9. **Claims 18, 19, and 21** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claims 33 and 39, 18, and 21**, in the examiner's opinion, it would not have been obvious to have the systems, as claimed, included receiving a user selection that defines a number of variations that are to be presented to the user, and subsequently generating the selected number of variations.

Citation of Pertinent Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Blumberg (U.S. Patent Number 6,449,639) discloses a system that scales a document according to user requests.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

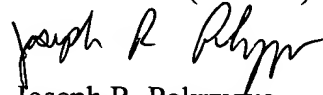
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph R. Pokrzywa
Examiner
Art Unit 2622

jrj



EDWARD COLES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600